

## Direction of chip flow for milling of shaped surfaces by ball end mill

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### Abstract

© Published under licence by IOP Publishing Ltd. There investigated the direction of chip flow on the front surface by machining with non-cylindrical original instrumental surface end mills.

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### References

- [1] Semenchenko I I, Matyushin V M and Saharov G N 1963 Proektirovanie metallovezhushchih instrumentov [The design of metal-cutting tools] (Moskva: Gosudarstvennoe nauchno-tehnicheskoe izdatel'stvo mashinostroitel'noj literatury) 951
- [2] Golubev S A 1959 Vliyaniye ugla naklona vintovyh zub'ev frez na stojkost' [The influence of the angle of inclination of the screw teeth of cutters on the resistance] Stankii instrument 10 34-35
- [3] Safarov D T and Kondrashov A G 2018 Stand for monitoring the operational parameters of conjugations "ball support - Body of the tie-rod end" of automotive components IOP Conference Series: Materials Science and Engineering 289 012018
- [4] Ryabov E A and Yu Yurasov S 2016 Creating a rigid model of solid end radius cutter in NX IOP Conference Series: Materials Science and Engineering 134 012034
- [5] Khusainov R M, Sabirov A R and Mubarakshin I I 2017 Study of deformations field in the working zone of vertical milling machine Procedia Engineering 206 1069-74
- [6] Safarov D T, Kondrashov A G, Glinina G F and Safarova L R 2017 Algorithm of calculation of energy consumption on the basis of differential model of the production task performed on machines with computer numeric control (CNC) IOP Conference Series: Materials Science and Engineering 240 012060
- [7] Ushakov M V, Ivanov V V and Pavlova E V 2014 Opredelenie napravleniya skhoda struzhki po perednej poverhnosti instrumenta [Determination of the direction of chip flow on the front surface of the tool] Izvestiya Tul'skogo gosudarstvennogo universiteta. Tekhnicheskie nauki 5 118-23